

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently amended) A method for facilitating typesafe software design
2 while supporting structured composition of a software system, comprising:
3 receiving a first invocation of the software system;
4 assigning a first context to the first invocation;
5 examining the first invocation to locate components of the first invocation;
6 registering a unique factory to build each component, wherein these
7 factories are registered using the first context;
8 providing an additional factory for building an extended component of the
9 first invocation; and
10 when a component is needed, building the component using the unique
11 factory associated with the component, whereby building the component after
12 each component has a registered factory eliminates potential problems with
13 initialization circularity.

1 2. (Original) The method of claim 1, further comprising:
2 receiving a second invocation of the software system;
3 assigning a second context to the second invocation;
4 examining the second invocation to locate components of the second
5 invocation;
6 registering a unique factory to build each component, wherein these
7 factories are registered using the second context; and

8 when a component is needed, building the component using a factory
9 associated with the component, whereby building the component after each
10 component has a registered factory eliminates problems with initialization
11 circularity.

1 3. (Original) The method of claim 2, wherein components from the second
2 invocation are not available to the first invocation.

1 4 (Canceled).

1 5. (Original) The method of claim 1, wherein registering the unique
2 factory to build each component involves placing a key and a related factory
3 identifier into a storage structure.

1 6. (Original) The method of claim 5, wherein building the component
2 using the factory associated with the component involves using the key to retrieve
3 the related factory identifier from the storage structure.

1 7. (Original) The method of claim 6, wherein the storage structure includes
2 a hash table.

1 8. (Currently amended) A computer-readable storage device-medium
2 storing instructions that when executed by a computer cause the computer to
3 perform a method for facilitating typesafe software design while supporting
4 structured composition of a software system, ~~wherein the computer-readable~~
5 ~~storage-medium includes magnetic and optical storage devices, disk drives,~~
6 ~~magnetic tape, CDs (compact discs), and DVDs (digital versatile discs or digital~~
7 ~~video discs), the method comprising:~~

8 receiving a first invocation of the software system;
9 assigning a first context to the first invocation;
10 examining the first invocation to locate components of the first invocation;
11 registering a unique factory to build each component, wherein these
12 factories are registered using the first context;
13 providing an additional factory for building an extended component of the
14 first invocation; and
15 when a component is needed, building the component using the unique
16 factory associated with the component, whereby building the component after
17 each component has a registered factory eliminates potential problems with
18 initialization circularity.

1 9. (Currently amended) The computer-readable storage device-medium of
2 claim 8, the method further comprising:
3 receiving a second invocation of the software system;
4 assigning a second context to the second invocation;
5 examining the second invocation to locate components of the second
6 invocation;
7 registering a unique factory to build each component, wherein these
8 factories are registered using the second context; and
9 when a component is needed, building the component using a factory
10 associated with the component, whereby building the component after each
11 component has a registered factory eliminates problems with initialization
12 circularity.

1 10. (Currently amended) The computer-readable storage device-medium of
2 claim 9, wherein components from the second invocation are not available to the
3 first invocation.

1 11 (Canceled).

1 12. (Currently amended) The computer-readable storage device~~medium~~ of
2 claim 8, wherein registering the unique factory to build each component involves
3 placing a key and a related factory identifier into a storage structure.

1 13. (Currently amended) The computer-readable storage device~~medium~~ of
2 claim 12, wherein building the component using the factory associated with the
3 component involves using the key to retrieve the related factory identifier from the
4 storage structure.

1 14. (Currently amended) The computer-readable storage device~~medium~~ of
2 claim 13, wherein the storage structure includes a hash table.

1 15-21 (Canceled).